

What is claimed is:

1. A method of forming a polymer, comprising:

polymerizing a bicontinuous microemulsion comprising water, a monomer, and a surfactant copolymerizable with said monomer, to form a porous polymer comprising a polymer matrix defining interconnected pores filled by said water, wherein said microemulsion further comprises a drug such that, when said porous polymer is formed, said drug is dispersed in one or both of said polymer matrix and said pores and is releasable therefrom when said porous polymer is in contact with a liquid.
2. The method of claim 1, wherein said drug is an ophthalmic drug.
3. The method of claim 1 or claim 2, wherein said pores have a pore diameter of about 10 to about 100 nm.
4. The method of any one of claims 1 to 3, wherein the proportion of said water is from about 15% to about 50% by weight, the proportion of said monomer is from about 5% to about 40% by weight, and the proportion of said surfactant is from about 10% to about 50% by weight.
5. The method of any one of claims 1 to 4, wherein said microemulsion further comprises a cross-linker.
6. The method of claim 5 wherein the cross-linker is EGDMA.
7. The method of any one of claims 1 to 6, wherein said microemulsion further comprises a polymerization initiator.
8. The method of claim 7, wherein said polymerization initiator is a photo-initiator.
9. The method of claim 8 wherein the photo-initiator is DMPA.

10. The method of claim 9, wherein said polymerizing comprises subjecting said microemulsion to ultraviolet radiation.
11. The method of any one of claims 1 to 10, wherein said monomer is ethylenically unsaturated.
12. The method of claim 11, wherein said monomer is methyl methacrylate (MMA), 2-hydroxyethyl methacrylate (HEMA), or a combination of MMA and HEMA.
13. The method of any one of claims 1 to 12, wherein said surfactant is a non-ionic surfactant.
14. The method of any one of claims 1 to 13, wherein said surfactant is a poly(ethylene oxide)-macromonomer.
15. The method of claim 14 wherein the surfactant is C₁-PEO-C₁₁-MA-40.
16. A polymer formed in accordance with the method of any one of claims 1 to 15.
17. A polymer comprising:
 - a polymer matrix defining interconnected pores distributed throughout said polymer; and
 - a drug dispersed in one or both of said polymer matrix and said pores, said drug being releasable therefrom when said polymer is in contact with a liquid.
18. The polymer of claim 17, wherein said pores have a pore diameter of about 10 to about 100 nm.
19. The polymer of claim 17 or claim 18, wherein said drug is an ophthalmic drug.
20. A drug delivery device comprising:

a transparent and porous polymer defining interconnected pores; and
an ophthalmic drug dispersed in one or both of said polymer and said pores,
wherein said ophthalmic drug is releasable from said drug delivery device when
said drug delivery device is in contact with a liquid.

21. The drug delivery device of claim 20, which is a contact lens or an artificial cornea.

22. The drug delivery device of claim 20 or claim 21, wherein said pores have a pore diameter of about 10 to about 100 nm.

23. A method of delivering an ophthalmic drug, comprising:

loading said ophthalmic drug in an ophthalmic device comprising a transparent and porous polymer, said polymer defining interconnected pores, said ophthalmic drug dispersed in one or both of said polymer and said pores, wherein said ophthalmic drug is releasable from said ophthalmic device when said ophthalmic device is in contact with a liquid.

24. The method of claim 23, wherein said ophthalmic device is a contact lens or an artificial cornea.